

is no means of communication by telegraph or wireless, and the town, Villa Baleira, seems to be little altered from the time when Columbus walked its streets and married the daughter of the governor. Only Portuguese is spoken, and we should have had a difficult time but for our friend Miss Nancy Paterson, the daughter of the Scotch minister in Funchal, who has an intimate knowledge of the language, the island and the people. With her assistance we were able to secure an excellent guide, and boat-crews to take us to the various islets. We found the people most friendly, and left them with regret. Owing to the magnificent bathing beach (something that Madeira lacks) there is now much talk of building a fashionable hotel for summer tourists. Very likely a few years will see a complete change in the character of the place, and though prosperity may come thereby, something will be lost, which we—and Columbus—loved in our time.

ADDITIONAL OCCURRENCES OF PLEISTOCENE PLANTS

BY EDWARD W. BERRY

A few additions to the Pleistocene flora of southeastern North America are contained in the following brief notes upon two small collections of fossil plants from Alabama and Tennessee.

ALABAMA

The following identifications are from material sent in by Dr. E. A. Smith, the State Geologist of Alabama. The plants occur in a $3\frac{1}{2}$ foot peaty bed, underlain by white sand and overlain by about 16 feet of clay and sand, exposed in a cut on the Louisville and Nashville Railroad near Mountain Creek, Chilton County, Alabama. The lithologic character of the materials suggests a terrace deposit, and I regard the age as Pleistocene. The collection contains much coniferous wood, too decayed for generic determination, and the following named forms:

Pinus glabra Walt. Cones, cone axes and cone scales. This fossil occurrence is about the present northern limit of the Southern Spruce Pine, or slightly beyond, since it is rare north of the Central Prairie region of Alabama. In its wider range it is found from South Carolina to Louisiana.

Arundinaria sp., probably *macrosperma* Michx. Based on leaves. A common species of water courses and low damp woods.

Hicoria sp., probably *minima* (Marsh) Britton. Based on a nut. A wide ranging species in the existing flora, of no especial significance in the present connection.

TENNESSEE

This material comprises fruits or seeds coming from the loess of western Tennessee, which here has the appearance of being water lain. It was collected by Dr. Bruce Wace from the bottom of a 35 foot dug well, 5½ miles northwest of Covington, Tipton County, Tennessee. The identifications are by W. L. McAtee of the Biological Survey, and the species, so far as they can be determined, are all present in the existing flora of this region. So far as I recall the only plant fossil previously recorded from the loess is a nut of *Celtis mississippiensis* Bosc.¹

Carex sp. Achenes of this form are very common in the loess, but the numerous existing species of *Carex* are difficult of discrimination from the fruits alone.

Persicaria sp. Identification certain as to genus, but the species are in general very difficult of separation from the character of the achenes. The many existing species are wide ranging.

Meibomia paniculata (Linné) Kuntze. This is a wide ranging dry soil species in the existing flora. The loess occurrence is based upon a single joint of a pod which is almost certainly this species.

Viburnum sp., probably *nudum* Linné. Based on a single stone. I have previously recorded the stones of this species from the late Pleistocene of North Carolina² and Florida³. *Viburnum molle* Michx. is associated with *nudum* at the former locality, and *V. dentatum* Linné at the latter.

¹ Berry, E. W. *Torreyia*, 19: 10. 1919.

² Berry, E. W. *Torreyia*, 14: 160. 1914.

³ Berry, E. W. *Jour. Geol.* 25: 662. 1917.